PM J-AIT ITV Operations and Training Newsletter

February 2005

pmJ-AIT
PRODUCT MANAGER
JOINT-AUTOMATIC IDENTIFICATION TECHNOLOGY

Check out the PM J-AIT website at: http://www.eis.army.mil/AIT to view the latest PM J-AIT contract(s) for AIT and Radio Frequency Identification (RFID) hardware, software, technical engineering services, and maintenance.

Importing Joint Total Asset Visibility (JTAV) Data from the In-transit Visibility (ITV) Server to Recreate Broken or Lost Tags

Unfortunately, sometimes tags may get broken during shipment or they may become detached from cargo. By following the steps below, you can import the JTAV data from the ITV server and recreate a new tag with the information that was on a broken or lost tag:

1. First, identify the tag ID associated with the shipment in question. If the tag has been destroyed or lost, obtain the tag ID by logging on to the ITV server at https://highland.rfitv.army.mil. Using your ITV/AKO user name and password, do a query based on the container number or Transportation Control Number (TCN).

2. Once the tag ID is determined, access the JTAV 2.0 download link at https://highland.rfitv.army.mil/rfitv/JTAV20_import.html.

3. Enter the tag ID of the broken or lost tag and click *"Submit."* The screen displays the detailed tag data transmitted to the ITV server when the RF tag was originally written.

4. On the upper left hand corner of your web browser, click *"File,"* then select *"Save As."* A dialog box is displayed prompting you where to save the file. A file name must also be entered. For example, the tag ID would be a good naming convention (e.g. 467766). Make sure you save the file as a text file (*.txt), then click *"Save."*

Note: You *must* save this data as a text file (.txt) to import the data into TIPS Write.

5. Now that data is saved as a text file, start the TIPS Write software.
   - Click *"File"* and select *"Import Shipments."* This will display a dialog box.
   - In the dialog box, select *"JTAV 1.01 or JTAV 2.0"* as the *"Import File Type."*
   - Click *"Browse"* and find the file you saved during step 4.
   - Click *"Import."*
   - Follow the standard procedures for writing a tag using TIPS Write, ensuring the following message is added in the free text. "ORIGINAL TAG XXXXXX WAS DESTROYED."

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If this newsletter has been forwarded to you and you would like to be added to the distribution list, please send your request via E-mail to PM J-AIT (Jerry Rodgers) at jerry.d.rodgers@us.army.mil.

II Marine Expeditionary Force (MEF) Marines Receive RFID Technology Training

Information provided by Mr. Richard Mack, Computer Sciences Corporation (CSC) and Mr. Sherman Duncan, Logistics and Environmental Support Service Corporation (LESCO).

Marines attending the Logistics Operations School in Camp Lejeune, NC receive training on how to use active RFID technology in day-to-day operations (sustainment and unit deployment) while attending the Basic Logistics/Embarkation Specialist Course.

Students of the Logistics Operations School's Basic Logistics/Embarkation Specialist Course wrap cargo net onto a load of palletized embark boxes

RFID tags affixed to shipments will provide on-site "inside-the-box-visibility" of commodity and Transportation Control and Movement Document (TCMD) data. The data is also replicated and available for viewing/analyzing on the ITV server.

Major Mike Murchison, 2d Force Service Support Group (FSSG), SASSY Management Unit (SMU) Operations and Captain John Flynn, Marine Corps Combat Service Support School (MCCSSS), Logistics Operations School were contacted and provided an opportunity to coordinate ITV server data management/analysis training for deploying II MEF logisticians. PM J-AIT requested that Combined Arms Support Command (CASCOM) send ITV trainers, Mr. Richard Mack and Mr. Sherman Duncan, to Camp Lejeune to provide four classes on RF-ITV. On 19-20 January 2005, the training team provided a one-hour overview briefing of RF-ITV history/technology and then provided three four-hour classes on ITV server data management and analysis to USMC personnel.

Approximately 120 Marines, ranging from Private First Class to Colonel, from Camp Lejeune and Marine Corps Air Station Cherry Point, NC participated in the hands-on, web-based training using the RF-ITV servers for deployment and sustainment shipment tracking. Participants were from II MEF, 2d Marine Division (MarDiv), 2d Marine Aircraft Wing (MAW), 2d FSSG, Combat Service Support Detachment (CSSD) 25/28/29, and Marine Corps Base (MCB). Students received comprehensive ITV exercises to gain knowledge of RF tag read/write functions, operation of RF devices, the tag data upload process to the ITV server, and then used standard reports or queried data via the Local Area Network (LAN) to complete their own ITV data analyses.

The visit to Camp Lejeune was a "joint" success in spreading the word on the capabilities available on the ITV servers for tracking unit movements and sustainment shipments. A similar training offer is being investigated for deploying Camp Pendleton Marines.

Student Comments:

"….outstanding and relevant"

"The knowledge I gained during this course will be very useful."

"The information I received in the course will be of great help in my future position."

"The course was presented very well."

"…very informative"

Great job Richard and Sherman, and "Semper Fi."--Editor

Savi Tags Safe for Use on Aircrafts

A recent report on the results of an Electromagnetic Interference (EMI) test for Savi RFID devices conducted at Wright-Patterson Air Force Base, OH was released on 11 Feb 05. The report concludes that "RFID tags should not be a source for interference and should not impact the safety of the flight of the aircraft's electrical and electronic equipment." For more information go to:
http://www.eis.army.mil/AIT/news/RFID%20tags.pdf.

Critical/Mandatory Update for Savi Mobile Manager (SMM) Software

An error has been discovered when trying to write commodity data to a tag using Savi Mobile Manager (SMM) software on the Symbol 81XX series platform and the attached Savi Mobile Reader (SMR) also known as the "pod". An error will occur if the data being written has 129 to 255 commodity records. The error that occurs during operation is:

SMM Error: Failure in writing commodity records to the tag. Data may be corrupted. Extended Error Code:-2147214456.

The result is a corrupt record on the tag. If you try to read the tag again with SMM, you will get the same error message.

Savi has released a critical/mandatory update for SMM software to fix this error. The update version, SMM 6.3.1, was released on 11 January 2005 and has been placed on the Savi download web site. If you are using SMM software, it is imperative that you download the updated version to avoid the SMM error. Units that already have a download login can go and retrieve the new version now. If you do not have a download login, contact PM J-AIT at rfidmail@eis.army.mil to get a User ID and password.

The error ***DOES NOT*** affect the Tag Docking Station Write function nor does the error exist in the Tag Docking Station Software Development Kit (SDK).

If you have any questions, please feel free to contact the Savi customer support team at help@savi.com or 888-994-7284/408-743-8888.

Do You Have the Latest Version of TIPS?

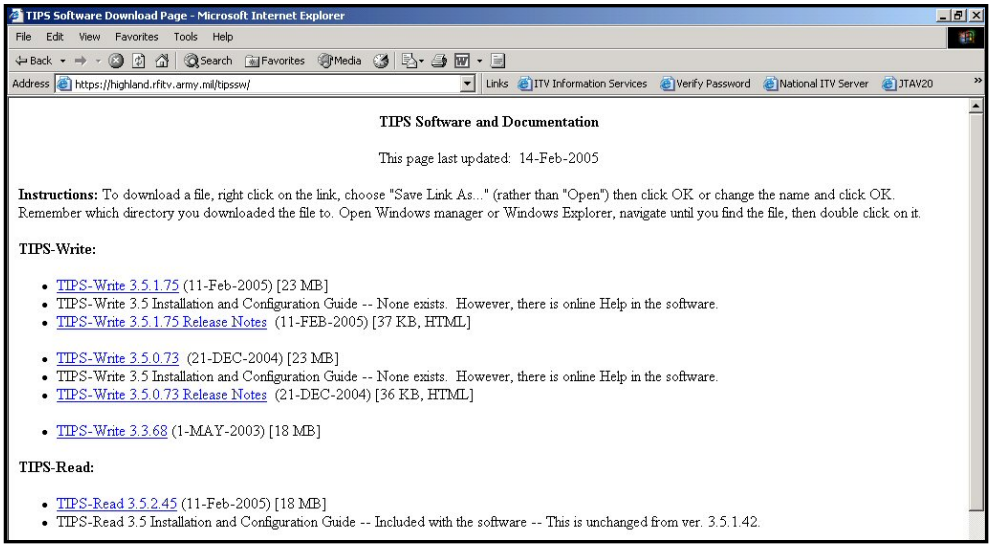
Updates to TIPS Write and TIPS Read were recently released on 11 February 2005. The latest versions, TIPS Write 3.5.1.75 and TIPS Read 3.5.2.45, include security maintenance updates and should be downloaded and installed as soon as possible.

For both of these maintenance updates:

* You must re-register after you apply the update, following the proper naming convention. It is recommended that you check the ITV server to ensure that your update was successful.

* Check that the new version is listed in the Help => About menu option.

The latest versions of TIPS software and documentation can be found at https://highland.rfitv.army.mil/tipssw/. (You will need your ITV or AKO User Name and password.)



All Points of Contacts (POCs) of TIPS sites should periodically check this site for updates to TIPS to ensure you have the latest versions of TIPS Write and TIPS Read.

DLA Sponsored Passive RFID Demo Held at Fort Lee, VA

The Defense Logistics Agency (DLA), in partnership with the United States Army Quartermaster School Training Division and United States Army Combined Arms Support Command (CASCOM) Directorate of Combat Developments for Enterprise Systems (DCD-ES), initiated a passive RFID effort to track Class 1 Items (Meal, Ready To Eat [MREs]) from order to the point of need. A successful technology demonstration of the on-going effort was conducted on 6 December 2004, at CASCOM, Fort Lee, VA. In attendance at the demonstration were Vice Admiral (VADM) Keith Lippert, Director DLA; Mr. Tom Edwards, SES-5 Deputy Commander CASCOM; Major General Daniel Mongeon, DLA Director of Logistics Operations; Brigadier General Scott West, Quartermaster General, Fort Lee, and Colonel Pat Hunt, United States Air Force (USAF). Also attending the demonstration were representatives from two of DLA's vendors and representatives of the US Department of Transportation. In the afternoon, the demonstration was repeated for the GCSS-Army blueprinting team, the Logistics Transformation Agency, the PM J-AIT office, and other interested organizations. The demonstration included the integration of passive RFID technology into the Army Supply Chain and the use of Advance Ship Notices (ASNs) for exchanging passive RFID tag identification information between supply chain nodes. "…this is an important first step in complying with the Office of the Secretary of Defense (OSD) mandate to employ passive RF technology," stated Mr. Fred Naigle, contract support contractor for the Army G4, in a Weekly Highlight.

Michelle Bills of CTC explains the integration of the passive RFID into the Army's retail supply system.

The DLA and Army Passive RFID Initiative is being conducted in a phased approach. Phase I activities were initiated in June 2004 with a DLA/Army RFID Feasibility Study conducted by a DLA contractor, Concurrent Technologies Corporation (CTC), Johnstown, PA. The feasibility study provided a map of the MRE supply chain from the placement of an MRE order through order fulfillment in a deployed tactical environment. Based on the analysis of the MRE supply chain and the automated systems supporting the process, CTC identified a number of options and scenarios for a Passive RFID Initial Implementation. Ultimately, the scenario chosen for Phase II (Figure 1) included the participation of the Army Quartermaster School at CASCOM, representing an Army Supply Support Activity (SSA), an MRE vendor as the source of supply, and an MRE cold storage facility representing an In-country Prime Vendor (IPV) supply chain node.

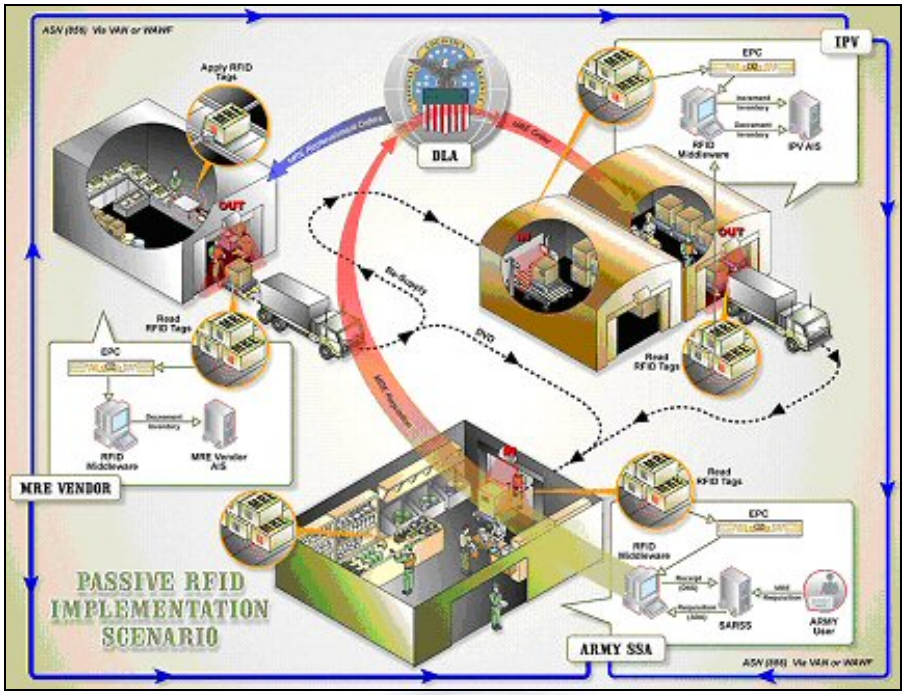


Figure 1: Phase II of the DLA-Army Passive RFID Initiative

The activities demonstrated in December 2004, highlighted the on-going Phase II DLA and Army efforts as follows:

- MRE requisition creation and receipt in the Standard Army Retail Supply System (SARSS)
- Creation of passive RFID tags for cases and pallets
- Tagging of MRE cases and pallets
- Aggregation of case data and the creation of an associated pallet tag
- Use of Advanced Shipping Notice (ASN) Implementation Convention (IC) for communicating passive RFID tag information
- Shipment and receipt of MRE pallets and cases
- Receipt of MREs into SARSS using passive RFID tag reads at the SSA node via an RFID portal.

As the Systems Integrator, CTC customized a Commercial Off-the-Shelf (COTS) RFID middleware to record passive RFID tag reads for the receipt of MREs. The equipment for the demonstration was provided by Psion Teklogix, Inc., Erlanger, KY, a global provider of solutions for mobile computing, wireless data collection, and RFID.

The demonstration equipment included the following:

- 9150 Wireless Gateway with 7535 Hand-Held Terminal
- RFID 900mhz Tethered Readers
- RFID Portals 900Mhz (2 Towers)
- RFID Printer
- RFID Middleware

Psion Teklogix representatives provided technical oversight and assistance with the RFID equipment set-up and configuration.

The demonstration illustrated the incorporation of passive RFID technology into the MRE supply chain and use of ASNs to communicate passive RFID information between supply chain nodes. It also provided an opportunity to demonstrate potential methods of integrating passive RFID technology with SARSS.

The successful completion of the Phase II DLA and Army efforts will provide benefits to the DoD by the development of a transferable business process model that utilizes passive RFID technology in supply chain inventory systems. Additional results of the on-going Phase II efforts will:

- Provide improved communication across the supply chain through the use of the ASN
- Automate the processing of passive RFID data into SARSS
- Integrate passive RFID technology with other AISs
- Contribute to passive RFID technology training at the Army Quartermaster Training School.

As a result of the successful demonstration in December 2004, and the on-going efforts of Phase II, DLA and the Army plan to launch a Phase III effort to prototype RFID technology on a larger scale, involving additional supply chain nodes and classes of supply. Integration efforts for the future phases will be conducted by CTC.

RFID Tags Staged, Stocked or Stashed? The Black Hole Theory…

Rick Boch, Logistics Management Specialist, Combined Arms Support Command (CASCOM)

Back in our October 2004 ITV newsletter, we had the pleasure of passing along that Tag ID# 1000000 (1 million) had been written in Sunny Point Military Ocean Terminal. Seeing the one millionth tag written, started the gears turning… where the heck are the other 999,999 tags? It's important to know that 80% of all the tags ever made have been purchased and used in the last five years. More impressive is that over 750,000 of these durable and reusable tags were placed in service in just the last two years as a result of Operation Enduring Freedom (OEF)/Operation Iraqi Freedom (OIF).

Keying in on the 750,000 durable/reusable tags just placed in service over the past two years, the NORTHCOM ITV server (also known as the CONUS or National ITV server) displays 115,000 of these tags which indicate they are traveling worldwide through the distribution pipeline. This leaves 635,000 tags unaccounted for. It would stand to reason that a portion of these tags have been staged or stocked by units/depots for required tag writing missions. Again, querying the NORTHCOM ITV Server, it was determined that 10,000 – 15,000 RF-tags are written every week worldwide. So even with a generous two-month stockage level for anticipated tag writing missions, only 90,000 – 135,000 are required. That leaves us now with 500,000 that seem to have disappeared into a "black hole". So what did we do with 500,000 tags?

We believe the "black hole" for RFID tags was probably created back in 2002 when CENTCOM required "……ALL AIR PALLETS, CONTAINERS, AND COMMERCIAL SUSTAINMENT MOVING TO/FROM THE THEATER AND INTRA-THEATER MOVEMENTS TO BE TAGGED WITH RFID AT ORIGIN FOR ASSET AND INTRANSIT VISIBILITY TRACKING IN THE CJOA. COMMANDS, SERVICES, AGENCIES, AND COMMERCIAL VENDORS MUST TAKE IMMEDIATE STEPS TO ACQUIRE, INSTALL, AND IMPLEMENT RFID TAGGING CAPABILITY." This requirement placed an immediate surge of demands on the RFID tag production line creating a temporary (approximately a five-month) shortage of tags. With a requirement to tag any shipment traveling intra/inter-theater and a lack of confidence in the supply system to meet timely demands, units began to "rat hole" tags just in case they were needed later. So, if this theory is accurate, then there are potentially thousands of tags being stored at tag writing sites world wide "just in case."

The purpose of the information in this article is to layout that the DoD has purchased and continues to purchase active RFID tags far exceeding its operational needs. These thousands of tags sitting in the "black hole" need to be placed back into the distribution channel. A quick review of 2,200 tags, which have not been active (seen on the ITV server) for at least the past two years, showed that almost 25% of these tags reached their final destination (the last seen event was either "erased" or "TK6"); then they were placed on the shelf and are still sitting there "just in case". In order to clean up the "black hole" we need your help in ensuring that when tags reach their final destination they are turned in to a central repository for reuse and/or redistribution.

From and For the Field…

New Guidance on the RFID and ITV Policies and Operations in the CFLCC AOR:

http://www.cascom.army.mil/Automation/ITV/documentation/CFLCCRFIDandITVpolicy29Jan05.pdf

This policy applies to all shipments being sent to the CENTCOM AOR. For all other cargo, shipping practices must be in accordance with DoD established guidelines.

RFID Quotes and Comments…

Comments from Colonel Mark Nixon, head of the Marine Corps' Logistics Vision and Strategy Center in a recent article in the RFID Journal:

"Just a few years ago, we had no idea where cargo was [in our supply chain]," he said. "RFID has revolutionized how those guys are doing it down on the ground. It's revolutionized the way we are doing things."

To view the article in its entirety, go to: http://www.rfidjournal.com/article/articleview/1414/1/1/

WANTED: RFID Tags

Suggestions for collecting and returning your unused tags:

- ✓ Set up a tag collection point.
- ✓ Once the shipment has reached its designation, invert the battery before you place it in collection box. This will deactivate the tag so it will not continue to be read by the ITV server.
- ✓ Send the magnetic mounts back too.

For more information on the DoD RFID tag return guidance and addresses, you can go to the DoD Logistics AIT Office website at:

http://www.dodait.com/refdoc/RF_TAG_RETURN_ADDRESS.pdf

OR

http://www.dodait.com/refdoc/RF_TAG_RETURN_ADDRESS.doc

In the Iraqi Zone (IZ), return all RFID tags to:

RF TAGS for RETROGRADE
TDC, KUWAIT

The point of contact is TDC Commander, DSN 318-438-8246

ITV Server Guide 2004 and AIT/RFID Operations Guide 2004:
http://www.cascom.army.mil/Automation/ITV/guidebooks/index.htm

TIPS Write and Read Operations Tutorial:
https://highland.rfitv.army.mil/TT/

ITV Servers:
CONUS: https://highland.rfitv.army.mil
USAREUR: https://itv.aelog.army.mil
Korea: https://usfkitv.korea.army.mil
CENTCOM: https://cenitv1.arifjan.arcent.army.mil
Training: https://trainer.rfitv.army.mil

RFID Global Status Reports

Keep track of your interrogator status with the RFID Global Status Reports. The RFID Global Status Reports are issued via e-mail by PM J-AIT on a weekly basis. The report is provided in detail and summary formats for your information and review. At the date and time the reports are generated, non-operational sites are reflected in the last column of the RFID Global Status Detail Report.

If you are not currently on the distribution list to receive these reports and would like to be, please contact PM J-AIT (Jerry Rodgers) at: jerry.d.rodgers@us.army.mil